Claims

1. Welding device (1) having a current source (2) for supplying electrical energy to at least one electrode and a control and/or evaluation unit (4) co-operating with the current source (2), having an input device (57) for setting various welding parameters, characterised in that a communications interface (23) connected to the control and/or evaluation unit (4) is provided in order to set up a two-way data exchange between the welding device (1) or the current source (2) via a web-server, in particular a HTTP server (24, 27).

2. Welding device as claimed in claim 1, characterised in that the web server, in particu-lar the HTTP server (24, 27) is disposed in the welding device (1) or the current source (2).

3. Welding device as claimed in claim 1, characterised in that the web server, in particu-lar the HTTP server (24, 27) is disposed externally to the welding device (1) or the current source (2), in particular in a computer or a computer unit (35) or a personal computer (26, 36).

4. Welding device as claimed in one or more of the preceding claims, characterised in that the web server, in particular the HTTP server (24, 27) establishes a connection to a pri-mary network, in particular to the INTERNET (34) and/or to an INTRANET (33) for a data exchange with another web server, in particular a HTTP server (24, 27).

5. Welding device as claimed in one or more of the preceding claims, characterised in that the control and/or evaluation unit (4) is as a computer unit (35) which operates by means of software modules of a control programme and processes and prepares received data and/or data to be transmitted.

6. Welding device as claimed in one or more of the preceding claims, characterised in that the communications interface (23) is a TCP/IP interface and enables a communication to be operated using the TCP/IP protocol.

7. Welding device as claimed in one or more of the preceding claims, characterised in that the communications interface (23) is designed to link into a local area network (31), in

particular into an INTRANET (33), and/or into a global network (32), in particular the INTERNET (34).

8.   Welding device as claimed in one or more of the preceding claims, characterised in that the software modules can be down loaded via the local area network (31), in particular the INTRANET (33) and/or via the global network (32), in particular the INTERNET (34), to the control and/or evaluation unit (4).

9.   Welding device as claimed in one or more of the preceding claims, characterised in that the welding device (1), in particular the control and/or evaluation unit (4) has a standardised interface, via which the welding device (1) is connected with a coupling device (54) on the network (25), in particular by a modem (55) or a network card (56).

10.   Welding device as claimed in one or more of the preceding claims, characterised in that the standardised interface is a serial interface, in particular a RS 232 interface.

11.   Welding device as claimed in one or more of the preceding claims, characterised in that a modem (55) is provided in the welding device (1) for external communication in order to establish a dial-up connection on the telephone network or co-operates with the control and/or evaluation unit (4).

12.   Welding device as claimed in one or more of the preceding claims, characterised in that data for welding processes and/or codes for optionally configuring the welding device (1) can be externally downloaded or uploaded by the latter.

13.   Welding device as claimed in one or more of the preceding claims, characterised in that data relating to operating supplies, e.g. quantity and/or nature of the welding electrode, a fusible welding wire (13), an inert gas and similar, and/or data relating to components susceptible to wear, e.g. a contact sleeve, a gas nozzle and similar, may be retrieved and/or transmitted to other network participants 37 via the network (25).

14.   Welding device as claimed in one or more of the preceding claims, characterised in that data relating to the operation of the welding device (1), e.g. duration of use, timing of us-

age, welding settings and similar, may be retrieved from at least one other network participant (37) and/or transferred to another network participant (37) in cycles.

15. Welding device as claimed in one or more of the preceding claims, characterised in that the input device (57) is set up to operate the welding device (1) and/or to navigate and select data from the data files of a technical data base (59) for welding technology.

16. Welding device as claimed in one or more of the preceding claims, characterised in that the input device (57) comprises a keyboard, a pointer device, a push-stick control member or various other operating elements in the form of rotating and/or sliding elements with keying and/or switching functions.

17. Welding device as claimed in one or more of the preceding claims, characterised in that data managed by the control and/or evaluation unit (4) and/or entered via the input device (57) and/or retrieved from the primary network (25) can be displayed and/or indicated by signals on an output device (58) co-operating with the welding device (1).

18. Welding device as claimed in one or more of the preceding claims, characterised in that the control and/or evaluation unit (4) comprises a personal computer (26, 36) to which an optical output device (58), in particular a monitor, is assigned.

19. Welding device as claimed in one or more of the preceding claims, characterised in that the software modules are of the object-oriented type.

20. Welding device as claimed in one or more of the preceding claims, characterised in that the control and/or evaluation unit (4) has a software module for a sequencing system or operating system for integrating the object-oriented software modules and processing the control programme.

21. Welding device as claimed in one or more of the preceding claims, characterised in that the control and/or evaluation unit (4) is designed to operate the software modules on a cyclical and/or interrupt-controlled basis.

22. Welding device as claimed in one or more of the preceding claims, characterised in that the software modules are written in JAVA source language.

23. Welding device as claimed in one or more of the preceding claims, characterised in that the control and/or evaluation unit (4) has a JAVA interpreter or can be operated thereby.

24. Welding device as claimed in one or more of the preceding claims, characterised in that the control and/or evaluation unit (4) has a JAVA processor.

25. Welding device as claimed in one or more of the preceding claims, characterised in that the communications interface (23) is designed for setting up a wireless data transmission route (64) to the desired communication transmission system or communication partner.

26. Welding device as claimed in one or more of the preceding claims, characterised in that the communications interface (23) is an infrared interface (61, 63) for transmitting and/or receiving infrared signals (62) between the welding device (1) and a mobile telephone (60).

27. Welding device as claimed in one or more of the preceding claims, characterised in that the infrared interface (61) of the welding device (1) is designed to set up a connection with an infrared interface (63) of the mobile telephone (60).

28. Welding device as claimed in one or more of the preceding claims, characterised in that the communications interface (23) is designed to connect directly or indirectly via the network (25) with a programming and display unit (67) provided as a stand-alone unit.

29. Method of operating a welding device (1) having an energy source controlled by a control and/or evaluation unit (4) in order to apply electrical energy to at least one electrode, whereby the control and/or evaluation unit (4) processes software modules and operates on the basis of the pre-set instructions thereof as well as any specific settings entered, characterised in that a communications interface (23) is provided, by means of which the software modules and/or data can be sent to a web server, in particular a HTTP server (24, 27) or retrieved from a web server, in particular a HTTP server (24, 27).

30.   Method as claimed in claim 29, characterised in that the software modules to be run by the control and/or evaluation unit (4) are determined by codes transmitted via the network (25).

31.   Method as claimed in claim 29 or 30, characterised in that operating data relating to operating supplies, operating statuses and similar, for example, can be transmitted to other network participants (37) and/or retrieved by other network participants (37) if necessary via the web server, in particular the HTTP server (24, 27).

32.   Method as claimed in one of more of claims 29 to 31, characterised in that the control and/or evaluation unit (4) controls a welding process and the resultant data cam be transmitted to other network participants (37).

33.   Method as claimed in one of more of claims 29 to 32, characterised in that servicing requirement messages and/or service requests and/or messages relating to stocks of operating supplies and/or orders for operating supplies can be downloaded from the control and/or evaluation unit (4) to other network participants (37).

34.   Method as claimed in one of more of claims 29 to 33, characterised in that a local area network (31), in particular in the form of an INTRANET (33), and/or a global network (32), in particular the INTERNET (34), is used to load and/or transfer data or software modules.

35.   Control and/or evaluation unit for a welding device, in particular as claimed in one or more of claims 1 to 28, characterised in that a communications interface (23) is provided in order to connect to a primary network (25) as claimed in one or more of the preceding claims.